



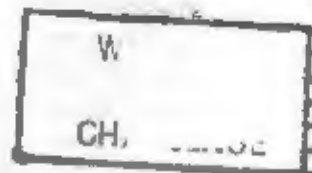
# Ø BEAT



AUGUST 1985

**COLORADO SPRINGS,  
COLORADO**

FIFTY CENTS AN ISSUE / \$4 PER YEAR



Frank Drake - KL7IPV  
4964 Harvest Rd.,  
Colorado Springs, CO. 80917

**FIRST CLASS MAIL**



# Ø BEAT

P.P.R.A.A. DIRECTORS



PRESIDENT	Mike Stansberry KØTER 2630 E. Uintah 80909	636-1290
V. PRESIDENT	Frank Drake KL7IPV 4964 Harvest Rd. 80917	597-2406
SECRETARY	Mark Richardson NØEPF 24 N. Union 80909	473-1799
TREASURER	* Les Borst KCØNC 2542 E. Bijou 80909	634-3995
Board Member	* Oak Stockton KØROL 2023 Essex Ln. 80909	596-1395
Board Member	* Jim Sorrells WA9ABB	598-7543
Board Member	Al Vrooman NØCMW 1341 Diana Ln. 80909	473-1660
Board Member	* Ken Wyatt WA6TTY	687-1428

**ZERO BEAT** is published monthly in the interest of the the members of the Pikes Peak Radio Amateur Association Inc., Colorado Springs, Colorado. Cost is 50¢ per month for non-members or a \$4.00 per year subscription. Permission is given to reprint articles or excerpts provided credit is given. Deadline for submission of articles is the 21st of the month. Classifieds accepted anytime.

The Pikes Peak Radio Amateur Association meets on the second Wednesday of each month at Giuseppe's Depot Restaurant at 10 S. Sierra Madre at 7:30 p.m. All amateurs and interested parties are invited to attend.

Editor: Frank Drake KL7IPV, 4964 Harvest Rd, Colorado Springs, CO 80917 597-2406

## COMPUTER CORNER

FROM THE DESK OF YE OLDE EDITOR

I am back from my trip to Texas and California. In my absence, Ken Wyatt, WA6TTY, put the July issue together. Thank you, Ken, it really looked good. I don't suppose you would like a permanent position, HUH? In this issue you will see a new advertiser. Video Communications & Computers in Widefield. He has everything for computers. We also got five new subscribers to our newsletter since we started mailing only to members. Now if we could get the rest of the local hams to subscribe, and submit some articles, we would really be a notorious club paper. Oh well, I CAN dream can't I? We also have two articles from George Hinds, NØCIX/Q. George has been a regular contributor to the Lake Erie club newsletter and now lives here. In his modesty, George tells me to edit as I see fit. I have never found fit to do so, George writes some good stuff! George has a life long interest in trains and anything associated with them. He writes about that also, so you may see train stuff in the future. I wonder if George knows about the train running from Falcon to Ellicott? There are plans to put a "steamer" on the line. They are negotiating for an engine now. For that I'll even ride the train! I think that George will admit that the "romance" went away with the demise of the steam engine. I have no program this month, nothing has turned up in the program wall. Ken Wyatt said he would try to get me a program (as I write this, I haven't gotten it yet) and if he does, it'll be published. That is the only trouble with doing this before the deadline, I never am really sure what this newsletter is going to contain. The board has approved money to cover the difference between \$200 and the amount of raffle money available in October for the doorprize. At this time the doorprize will be another Kenwood TH21/A1, unless I can dicker for some other radio. So, if you'd like to see a mobile rig or a bigger HT, come and buy up those raffle tickets. On that line, thanks to Dave and Walker Electronics for helping with the doorprizes and also contributing. Go see those guys, they are ALRIGHT! But then, you already knew that. Dave runs specials every month, check 'em out. We have now got advertizers for everything from computers to radios. I hope that you are out there supporting our advertizers, they spend their money supporting US. Les will be conducting this months doorprize raffle, keep him busy buying those tickets. Me? I'll be in Texas again. Maybe Waco will be a little cooler this time. Boy, I hope so! Well, enough of this, see you next month, keep those cards and letters coming. 73,

Frank

\*\*\*\*\*

## "THE VIEW FROM THE ROCKIES"

by George Hinds, NSCIX/Ø

"The Tourists Are Coming, The Tourists Are Coming!" Verily, they are, for our Ute Pass highway (U.S. 24) known locally as the "Midland Expressway" (because much of it is constructed following the roadbed of the old Colorado Midland RR) is becoming one very busy road indeed. Earlier, it was just on the weekends; now, it is daily.

And, because much of the road is sharp curves and grades to 7%, accidents are not unusual - this, in turn, brings out Colorado's finest: the Colorado State Patrol. At times, there are as many as six patrol cars on duty in the Pass. So if you come to visit, a word of caution: Relax - observe the speed limits and the scenery.

Before moving here, at times I thought we Easterners had a corner on vandals - but not so! No way! Out west they also have vandals - but with a major difference - here the parents buy them .22's so they can destroy property with firearms, not rocks.

Thelma and I have been doing much local touring of late. The signs of rural vandalism, especially by firearms, are everywhere along the rural roads. One assumes children are the cause; if by adults, they are yet children. Highway signs particularly fall victim to rifle shots, as do signs and signals along railroads.

Tornado in the Rocky Mountains? Rare though it is, it can happen - and it did in early June, touching down just 5 miles southeast of our location in Green Mountain Falls. Creased a car and house with uprooted trees, but no personal injuries reported. At the time, we were in Denver visiting family.

The June 14 broadcast of the North American Teleconference Net

here was via the Pikes Peak FM Association Repeater on 37/97 and, with its antenna at over 14,000', you can bet it was heard far and away - even in adjoining states. The quality of the rebroadcast was excellent; much thanks to those amateurs and clubs for taking on such projects, shouldering the costs thereof, and pulling them off with nary a hitch... We of LEARA, as old hands at the Teleconference Net since it began, know how much is involved.

Sitting at the computer one day in early June, it was a pleasant surprise to hear my call on .97 - it was Art Neuman, KA8GPW calling! He was in Colorado Springs for a meeting; we got together for dinner and an evening visit at our house. We certainly enjoyed having Art with us, though the visit was much too short.

I think Art enjoyed his first real taste of the Rockies - though he did have a tough time getting a picture of the top of Pike's Peak: it seemed to be stuck in the clouds each time he was free from a meeting to use his camera.

Long-time members may remember my writing about a trip several years ago to New England. At that time, I noted how so many hams "down east" over-identify to the point of being ridiculous - well, one can note the same practice among too many hams here. It's been years since the Commission changed the regulations on identification; clearly the word has not gotten around to all.

Last weekend (June 8-9) there was an opportunity for local hams to participate in the "Teller Co. Hill Climb". Most of the terrain is around 9,000' elevation on gravel roads with hairpin turns. It's a test of men and machines on mountain roads. The evening before the race, the road is lined with spectators who will camp there for the night so as not to miss the action on race day. (Continued next page)

Continued:

### "THE VIEW FROM THE ROCKIES"

Amateurs from the Mountain Amateur Radio Association (Woodland Park) and other hams from the region provided 2-meter communications for race control purposes. As expected, it was another feather in the hat for amateur radio: the hams knew their equipment, what it could do, and used it to the fullest.

Not so, reportedly, for the team that was assigned to provide safety communications - they were non-hams, using equipment on business band, and their lack of knowledge about VHF-FM communications was evident in their field of responsibility, according to comments heard by some who were there.

Another of the year's big events is coming up July 13 - the Pikes Peak Hill Climb, likely one of the most famous auto races in the world today. The first such race was run in 1916, shortly after the highway was completed. The Pikes Peak Highway is 19 miles in length, with the race being run on the upper portion of the road all the way to the top at 14,110'.

Here again the amateurs of the region will be on hand to support this world-famous event with reliable communications, as they have in previous years. It will be a long, grueling day for the hams and the racers, since all will be on hand early in the day - amateurs must be at their post on the mountain by 6:45 a.m. ready to check in and operate in advance of the huge crowds arriving on the scene.

Safety is of the first importance and amateurs who take part must complete a safety training session before being allowed on the mountain that day. Once ready to go, they will be given special permits to pass the toll gate and climb the Peak that day.

Perhaps I can give you a later report on the race communications in the next issue of the LEARA NEWSLETTER based on first-hand observation - for

I hope to be among the amateurs on the mountain that day, along with the one guest allowed each ham volunteer - in this case, my wife. Incidentally, support for this public service project is evident among the ham community far and wide: volunteers are coming in groups from miles away.

A side note about the highway: it proved to be so expensive to maintain that the original builder/owner sold it - and then bought the Pikes Peak Cog Railroad, which was already a profitable enterprise before the auto road was built - and still is...

Today the toll charge to use the road is \$4 for adults, and \$2 for kids under 12. It is operated by the City of Colorado Springs; the charge helps to defray the cost of maintenance.

The Pikes Peak highway patrol cars use 453.900 MHz; the Pikes Peak Cog Railroad uses 161.550 MHz, for all you scanner users who may travel this direction. It may interest you to know that camping or overniting is not permitted on the Peak; except on the eve of the annual hill climb. In one capacity or another, there will be up to 500 volunteers on the mountain on race day helping to make it a safe and fun event for all.

You people in LEARA-land who participate in so many races and marathons for communications, how about this? Later in the year, the annual footrace to the Peak will take place. Running up the mountain, and then down again - and previously the winner has done this in well under 4 hours! So, as you can see, we do have our fun events out here, just as you do there. Fun to watch, that is; not to run... this is not quite like the "Six Cities Run" or the "Heart-A-Thon" we are used to doing back there.

In June I attended my first meeting of the Pikes Peak Radio Amateur Association to which I belong. It was much like LEARA: dinner, then the meeting, a break, and then the program of the evening. And, best of all, it is in the old D&RGW RR depot, now a very fine restaurant and shops. 73

The Board meeting of the Pikes Peak Radio Amateur Association was called to order July 15, 1985 at the home of Les, KC0NC. Present were Les; Ken, WA6TTY; Mike, K0TER; Mark, N0EPF; Frank, KL7IPV; Tom, AD00; and Jody, KA0ROY.

Some discussion of the Hill Climb communications was held and a short list of considerations were given to Mike concerning possible improvements.

The board had a difficult time formulating ideas for upcoming programs. For August, the meeting will break up into corner discussions on topics of interest to the members present. The board will also be soliciting ideas for programs. September and November are currently "open".

The picnic is still set for Saturday, August 17th at Oak's cabin. Maps should be available in 0-Beat or at the meeting. Oak indicated members could camp out late Friday afternoon and stay through Sunday if they desired. It was moved and seconded to advance \$200 to buy the necessary food and drink. The motion passed. Members are also exhorted to bring a covered dish (dessert, salad, casserole, etc.).

Again discussion occurred over a membership drive. Members with ideas should let a board member know.

Another HT will be offered as a doorprize at the October meeting with tickets set at \$1.00 each. It was moved and seconded to set the upper limit of cost for the HT at \$200. The motion passed.

A need to review the trailer insurance was expressed. Mark will obtain the necessary information including a replacement copy of the policy.

Mike said he would try to get out the Shuttle information as soon as the new launch date is determined and he receives the updated information.

There being no further business before the board, the meeting was adjourned at 10:05. The next meeting will be at Tom's on Pine Crest Dr.

Respectfully submitted,  
Mark, N0EPF

\*\*\*\*\*

**Centennial ★ ★ RCA  
ELECTRONICS**

2324 East Bijou, Colorado Springs, CO 80909  
PHONE: (303) 633-6666

**COLUMBIA**  
ELECTRONIC CABLES

**Weller® Xcelite®**

**SPRAGUE**  
**GC**  
ELECTRONICS

**SIMPSON**

Chemtronics Inc.

**SOAR**  
TEST INSTRUMENTS

**VIZ** Mfg. Co.

**TECH  
SPRAY**

**ARRL**

Howard W. Sams

Largest Supply of Electronic Parts  
In Southern Colorado

**TAB BOOKS**

WEATHER NET WEATHER NET WEATHER NET

The weather net has been called up numerous times in July. There were as many as 35 check-ins and those used to check stream runoff. The weather bureau has appreciated the help and cooperation given to it by the local hams. Bud, W80TIB, has gone to the weather bureau many times to relay info back and forth to the weather service. Plans are afoot now to have a season end debriefing with the hams and to formulate plans to increase the effectiveness of the ham community. The little glitches we experienced were over come and we learned much as the storms moved through Colorado Springs. From all the people at the weather service, thanks to all who helped. The season is not over yet and we know that hams can always be counted on to be there when there is a need. 73.

\*\*\*\*\*





# THE AMERICAN RADIO RELAY LEAGUE, INC.

## SECTION MANAGER

William "Bill" Sheffield, KQ0J  
1444 Roslyn Street  
Denver, Colorado 80220

QST  
OFFICIAL JOURNAL

### VE TEST SCHEDULE

DATE	LOCATION & Sponser	CONTACT
Aug 17,85	Mile Hi Ve Team Lakewood, Colorado	W0IJR
Aug 24,85	Greeley ARC Ames Jr. College, Greeley	K00J
Sept 7,85	Pueblo ARC Pueblo, Colorado	WB0YES
Sept 21,85	Mile Hi Ve Team Lakewood, Colorado	W0IJR
Sept 22,85	Barcfest Swapfest Boulder VE Team	N0BWS
Sept - May 1985	ARA Ham Radio School 16th & Kingston, Aurora Novice Testing every Thursday evening. Schedule of VE Tests by the School to be announced.	KQ0J

To schedule for a VE Test, please send a completed 610 form w/copy of your license and a check made payable to "ARRL-VEC" in the amount of \$4.00, to the CONTACT person. Walkins are accepted at the discretion of each VE Team according to the paperwork and the size of their facility. To guarantee a reserved seating at a test session all paperwork should be sent to the CONTACT person 30 days in advance of test.

SINCE 1914 - OF, BY AND FOR THE RADIO AMATEUR

\*\*\*\*\*

#### GENERAL MEETING GENERAL MEETING

The next regularly scheduled meeting of the Pikes Peak Amateur Radio Association will be on August 14th, at 7:30 PM at Giuseppe's Depot at #10 South Sierra St.

Bring a guest and enjoy an evening with your ham friends. After the meeting, if enough people are interested, problems associated with radios and antennas will be disussed. This will be tried in order to answer questions for new and old hams who cannot seem to resolve those "small" problems that drive us nuts! See you there.

\*\*\*\*\*

\*\*\*\*\*

#### PPRAA Club Picnic

This years club picnic will be held at Oak Stockton's antenna farm and remote palace; located somewhere in the hills! Oak will be there to introduce you all to his new bride, Liz. Contrary to popular belief, Oak told me he did NOT "rob the cradle". A map to Oak's dude ranch is to be found elsewhere in this issue. Those who wish to may take a camper, or trailer to the site the night prior to the festivities. If you have any questions please call Oak for info. His number is 596-1395 and NO nighttime calls!!! The date of the picnic is August 17th, The club will also furnish soft drinks and meat ( hot dogs & hamburger).

**WHY  
PAY FULL PRICE?**

# BEFORE You Buy ANY

**COMPUTER, PERIPHERAL, SOFTWARE OR OTHER COMPUTER SUPPLIES  
CHECK OUR DISCOUNT MAIL ORDER PRICES!**

**FREE INSTALLATION & TRAINING ON ALL SYSTEMS WE SELL  
WE HANDLE MOST MAJOR BRANDS & SYSTEMS**

**RENTALS • LEASING • SALES • SERVICE • FINANCING • OFFICE SUPPLIES**

## VIDEO COMMUNICATIONS & COMPUTERS

**DISCOUNT  
OFFICE & COMPUTER  
SUPPLY CENTER**

**FEATURING**



**data  
systems**

THE QUALITY GOES IN BEFORE THE NAME GOES ON

**SANYO ZENITH MicroPro Polaroid**



**90 DAY - SAME AS CASH (W.A.C.)**

**OPEN MONDAY - SATURDAY 10 AM - 6 PM**

**392-9743**

**55 WIDEFIELD BLVD. (WIDEFIELD) SECURITY, CO. 80911**

- COMPUTERS
- FURNITURE
- LABELS
- POST CARDS
- PRINTERS
- DISKETTES
- PAPER
- RAM CHIPS
- MODERNS
- MONITORS
- SOFTWARE
- CABLES



## W1AW Schedule

April 28 — October 27, 1985

MTWThFSn = Days of Week Dy = Daily

W1AW code practice and bulletin transmissions are sent on the following schedule:

UTC Slow Code Practice	MWF: 0200, 1300, 2300; TThSSn: 2000; Sn: 0200
Fast Code Practice	MWF: 2000, TTh: 0200, 1300; TThSSn: 2300, S: 0200
CW Bulletins	Dy: 0000, 0300, 2100; MTWThF: 1400
Teleprinter Bulletins	Dy: 0100, 0400, 2200; MTWThF: 1500
Voice Bulletins	Dy: 0130, 0430
EDT Slow Code Practice	MWF: 9 A.M., 7 P.M.; TThSSn: 4 P.M., 10 P.M.
Fast Code Practice	MWF: 4 P.M., 10 P.M.; TTh: 9 A.M.; TThSSn: 7 P.M.
CW Bulletins	Dy: 5 P.M., 8 P.M., 11 P.M.; MTWThF: 10 A.M.
Teleprinter Bulletins	Dy: 6 P.M., 9 P.M., 12 P.M.; MTWThF: 11 A.M.
Voice Bulletins	Dy: 9:30 P.M., 12:30 A.M.
CDT Slow Code Practice	MWF: 8 A.M., 6 P.M.; TThSSn: 3 P.M., 9 P.M.
Fast Code Practice	MWF: 3 P.M., 9 P.M.; TTh: 8 A.M.; TThSSn: 8 P.M.
CW Bulletins	Dy: 4 P.M., 7 P.M., 10 P.M.; MTWThF: 8 A.M.
Teleprinter Bulletins	Dy: 5 P.M., 8 P.M., 11 P.M.; MTWThF: 10 A.M.
Voice Bulletins	Dy: 8:30 P.M., 11:30 P.M.
MDT Slow Code Practice	MWF: 7 A.M., 5 P.M.; TThSSn: 2 P.M., 8 P.M.
Fast Code Practice	MWF: 2 P.M., 8 P.M.; TTh: 7 A.M.; TThSSn: 5 P.M.
CW Bulletins	Dy: 3 P.M., 6 P.M., 9 P.M.; MTWThF: 8 A.M.
Teleprinter Bulletins	Dy: 4 P.M., 7 P.M., 10 P.M.; MTWThF: 9 A.M.
Voice Bulletins	Dy: 7:30 P.M., 10:30 P.M.
PDT Slow Code Practice	MWF: 6 A.M., 4 P.M.; TThSSn: 1 P.M., 7 P.M.
Fast Code Practice	MWF: 1 P.M., 7 P.M.; TTh: 6 A.M.; TThSSn: 4 P.M.
CW Bulletins	Dy: 2 P.M., 5 P.M., 8 P.M.; MTWThF: 7 A.M.
Teleprinter Bulletins	Dy: 3 P.M., 6 P.M., 9 P.M.; MTWThF: 8 A.M.
Voice Bulletins	Dy: 6:30 P.M., 9:30 P.M.

### Notes

Code practice, Qualifying Run and CW bulletin frequencies: 1.816, 3.58, 7.08, 14.07, 21.08, 28.08, 50.08, 147.555 MHz.

Teleprinter bulletin frequencies: 3.625, 7.095, 14.095, 21.095, 28.095, 147.555 MHz.

Voice bulletin frequencies: 1.60, 3.99, 7.25, 14.29, 21.39, 28.59, 50.19, 147.555 MHz.

Slow code practice is at 5, 7½, 10, 13 and 16 WPM.

Fast code practice is at 35, 30, 25, 20, 15, 13 and 10 WPM.

On Monday, Wednesday and Friday, 1300 through 2100 UTC, transmissions are beamed to Europe on 14, 21 and 28 MHz; on Wednesday at 2200 UTC they are beamed south.

Code practice texts are from QST, and the source of each practice is given at the beginning of each practice and at the beginning of alternate speeds. For example, "Text is from July 1985 QST, pages 9 and 77" indicates that the main text is from the article on page 9 and the mixed number/letter groups at the end of each speed are from the contest scores on page 77.

On Fridays, UTC, a DX bulletin replaces the regular bulletin transmissions. On Wednesdays at 2230 UTC, an IARU Region 2 bulletin in English and Spanish on 45.45-baud Baudot is sent on the regular teleprinter frequencies, beamed to Central and South America.

W1AW CW and voice bulletins are sent on OSCAR 10, Mode B, when the satellite is within range. Look for CW on 145.840 MHz and SS8 on 145.982 MHz.

Teleprinter bulletins are 45.45-baud Baudot, 110-baud ASCII and 100-baud AMTOR, FEC mode. Baudot, ASCII and AMTOR (in that order) are sent during all 1500 UTC transmissions, and 2200 UTC on TThFSn. During other transmission times, AMTOR is sent only as time permits.

CW bulletins are sent at 18 WPM.

W1AW is open for visitors Monday through Friday from 8 A.M. to 1 A.M. EDT and on Saturday and Sunday from 3:30 P.M. to 1 A.M. EDT. If you desire to operate W1AW, be sure to bring a copy of your license with you. W1AW is available for operation by visitors between 1 and 4 P.M. Monday through Friday.

In a communications emergency, monitor W1AW for special bulletins as follows: voice on the hour, teleprinter at 15 minutes past the hour, and CW on the half hour.

W1AW will be closed on September 2.

## "THE VIEW FROM THE PEAK"

by George Hinds, N8CIX/Ø

In the last issue, mention was made of giving readers some insight as to the Pikes Peak Hill Climb from the angle of ham radio participation. Due to circumstances beyond my control, I was unable to be on the mountain that day (July 13). I did have a brief chat with the amateur coordinator for ham spotters on the course, "Doc" Cornell, WØMCT, and the following details may be of interest.

### THE RACE UP THE MOUNTAIN

Fifty-four amateurs were on hand just after sunrise on race day, some of whom camped on the mountain overnight to be in place before the hordes of onlookers arrived. They had the task of being spotters along the course to watch for incidents, accidents or problems of any sort that would effect the safety of the drivers and spectators.

In addition, a group of amateurs from the Pikes Peak FM Association had the task of providing communications for the race timing officials.

The course was 12.4 miles over the upper, or dirt, section of the road to the top (14,110'). There were 60 driver/entrants registered for the day. Three racers went off the road while climbing the mountain, one of them flipped over and was injured (a broken arm) when a spectator jumped in front of the racer to play "chicken", and one race car struck a spectator.

The spectator playing "chicken" who caused the wreck was spotted by an alert ham who copied the description and license plate involved, leading to the apprehension of the guilty party.

Weather on the Peak was close to perfect during the event; the traffic jam of spectators going down the mountain at the close of the race was monumental - miles of cars and campers snaking down the road into Ute Pass.

The ham spotters used two frequencies, both simplex - and the hill was divided into two sections, each with its own control station. Race safety officials, at their control point, were busy! monitoring at least sixteen (16) different frequencies, including police, fire, helicopter, timers and ham spotters.

For those hams who camped overnight on the mountain (the only night of the year that camping is permitted) their peace was slightly disturbed by some campers who were rock music fans: huge amplifiers blasting music?? into the tents and campers on the mountain-side. Sometime later it was silenced after a visit by the highway patrol. It was unusual, but pretty, to see the lights of the campers strung up the side of Pikes Peak forming a lacy ribbon into the sky.

Race officials were obviously grateful to have amateur radio operators along the course as spotters even before the event began; after it was all over, their gratitude was overwhelming, after a day spent watching the conduct and performance of the hams during the event.

It was an experience for all the hams who played a part in this famous race - and they learned some valuable lessons to enable them to provide even more and better communications in the future from this "first time ever" at the Pikes Peak Hill Climb, "The Race to the Clouds."

What was the first thing they did after the race upon arriving home?

Most likely: TAKE A SHOWER! The gravel highway, the dust and flying dirt from the racers, some reaching speeds in the 100 mph range on straightaways, and at all other times flying around sharp curves (with no guard rails), left no one free of grime that day.

You probably read the details on the race and racers in the newspapers or saw it on TV - but it was the scores of volunteers working behind the scenes who made it a success.



# RAMBLINGS

FROM AROUND THE WORLD OF AMATEUR RADIO  
FROM WORLDRADIO NEWS - August 1985

( I felt that this was worth repeating )  
This is from the June issue of  
Worldradio News.

## KEEP BATTERIES FROM CHILDREN!!

Wafer-thin batteries used in  
calculators, watches, and cameras spell  
danger for young children.

Because those batteries are bright  
and shiny, they are easily discovered by  
children and can be fatal if they are  
swallowed. Even "dead" batteries can be  
harmful because of their chemical compo-  
sition.

In a recent incident, a young boy's  
parent's were unaware of the danger when  
their child swallowed one of these  
batteries. Several days later they  
sought medical help.

Unfortunately, it was too late. The  
alkaline chemicals had destroyed their  
son's esophagus.

Four other children inb Dallas  
recieved emergency surgery after  
swallowing the same type of batteries.  
Two other toddlers died because their  
parents were not aware of battery  
ingestion.

To protect your children from these  
potential killers, treat these batteries  
as you would any other poison - out of  
reach of children.

Thanks to Joe Profitt of the  
Wright/Patterson Base Safety Office and  
to R.F.Carrier.

Lake Erie ARA Cleveland, OH

## THE PRICE OF A RADIO FREQUENCY

The British government is trying to  
find out whether more efficient use of  
the radio frequencies can be achieved by  
charging for them. CSP International has  
been commissioned to carry out a study  
into pricing radio spectrum in the U.K.  
The area of study includes questions of  
whether there are any benefits to be had  
from bringing market forces and the  
price mechanism to the area of spectrum  
management. Also another question to be  
answered is whether it is technically  
and administratively feasible within a  
regulatory framework to charge for use  
of a frequency.

A separate contract will be awarded  
for another study of spectrum usage.

This should be of concern for all  
amateurs worldwide. We have always  
accepted that radio frequency should be  
free but with increased usage some  
special interest may want to purchase it  
from us. This may be the hobby's  
greatest problem in the future.

Tri-City Feedback, Broton, CT.

\*\*\*\*\*

## AMPLIFIERS ON 10 & 12 METERS

"The ten meter external amplifier ban  
covers the frequencies 24.00 to 35.00 Mhz  
and so includes the twelve meter band" an  
FCC official recently pointed out to an  
ARRL visitor to his office. This does not  
prevent the use of the full 1500 watts  
PEP in the new band. It just means that  
amplifiers which can operate in the 12  
meter band ( as well as the ten meter  
band ) can not be sold by manufacturers.

\*\*\*\*\*

The FCC is reviewing the performance  
of the volunteer examination coordinators  
as reported last month. " The Commission  
will keep track of the percentage of def-  
ective applications each VEC forwards to  
the FCC. The first time a mistake occurs,  
the FCC will correct the mistake and then  
notify the VEC. The next time, the appl-  
ication will be returned with action."

ARRL Letter, May 9, 1985

\*\*\*\*\*  
If it's CW, it's communications.

832- ALL MAJOR BRANDS 832-  
1111 SALES-SERVICE 1111  
8-530 Mon.-Fri. 8:30-1 Sat.

NORT NINEV MIKE W0NEXE BOB K4LQF  
John W0ADV  
RUS W0B1UL

**CW**

CW ELECTRONIC SALES CO.  
800 Lincoln St. Denver, CO 80203

The regular meeting of the Pikes Peak Radio Amateur Association was called to order July 7, 1985, at 7:30 pm in Giuseppe's Depot. There were fifty-six members and guests present.

After the minutes of the previous meetings were approved, Les, KC0NC, reported that the treasury had income of \$50.50 and expenses of \$278.62. This left a current balance of \$2007.29.

Brief reports were given by Ron, KC7QJ, on interference (two cases of possible overloading--it's not known if they are ham related) and by Mike, K0TER, on the success of Field Day. Members were also updated on the status of the Hill Climb which was to be held the succeeding weekend.

Mark, N0EPF, again noted that Novice classes are scheduled to begin October 2nd at North Junior High. A code trainer is needed; please contact Mark. Frank, KL7IPV, reported on the classes he is conducting. There seems to be good interest in education.

Jim, WA9ABB, and Ron are looking into sites for the 1986 Swapfest and will continue to report on their progress.

Discussion of where to store the trailer came up. It was moved and seconded to pay rental for the storage of the trailer. The motion was then tabled as alternatives are looked at.

The CCARC meeting and Glenwood Swapfest were announced as upcoming on July 27th. Also, the board meeting was set for July 14 at Les's home.

After the break and drawing, Ken, WA6TTY, presented a talk on how to write and publish an article in any of our ham-related magazines. Thank you very much Ken.

Subsequently, the meeting was adjourned. The next meeting will be August 14, 1985 at Giuseppe's.

Respectfully Submitted,

Mark, N0EPF

\*\*\*\*\*

V. E. Program for Colorado Springs

V. E. Testing for the purpose of obtaining, or upgrading an amateur radio station/ operators license, sponsored by the Pikes Peak Radio Amateur Association, will be conducted at the First United Methodist Church, located at 420 N. Nevada Ave., on the thirty first of August, 1985 and will start at 9:00 AM. Applications for testing will be limited to twenty people. There will be no walk-ins taken at this time.

Instructions: applicants must mail:

1. Completed current FCC form #10.
  2. Photo copy of current license.
  3. A \$4 check or money order payable to "ARRL/VEC".
  4. The above must reach the volunteer examiner team contact by Aug. 26, 1985.
- Send application to our team contact:

Peter La Fosse N0LA  
5750 N. Meridan Rd.,  
Peyton, CO. 80831

Note!!! Applicants will be required to provide photo proof of identification at the time of examination.

Handicapped applicants should notify the team contact immediately so that appropriate procedures can be coordinated.

For further information, the following may be contacted:

Ron Deutsch NK0P 593-8352

Max Stafford KD0EL 146.32 simplex

"Jake" Jacobs N0CYR 146.52 simplex

Membership in the PPRAA or in the ARRL is not a requirement for taking the above test.

Area accredited VE's who have not been contacted or haven't attended the VE meetings are welcome and requested to assist in the above examinations.

Talk-in will be in the 146.37/97 repeater.

\*\*\*\*\*

LOCAL REPEATER FREQUENCY IS 146.37/97



COLORADO SPRINGS  
*Walker Electronics Inc.*

JAVE — WØMEY

2836 N. PROSPECT, COLORADO SPRINGS, COLORADO 80907  
PHONE — (303) 636-1881

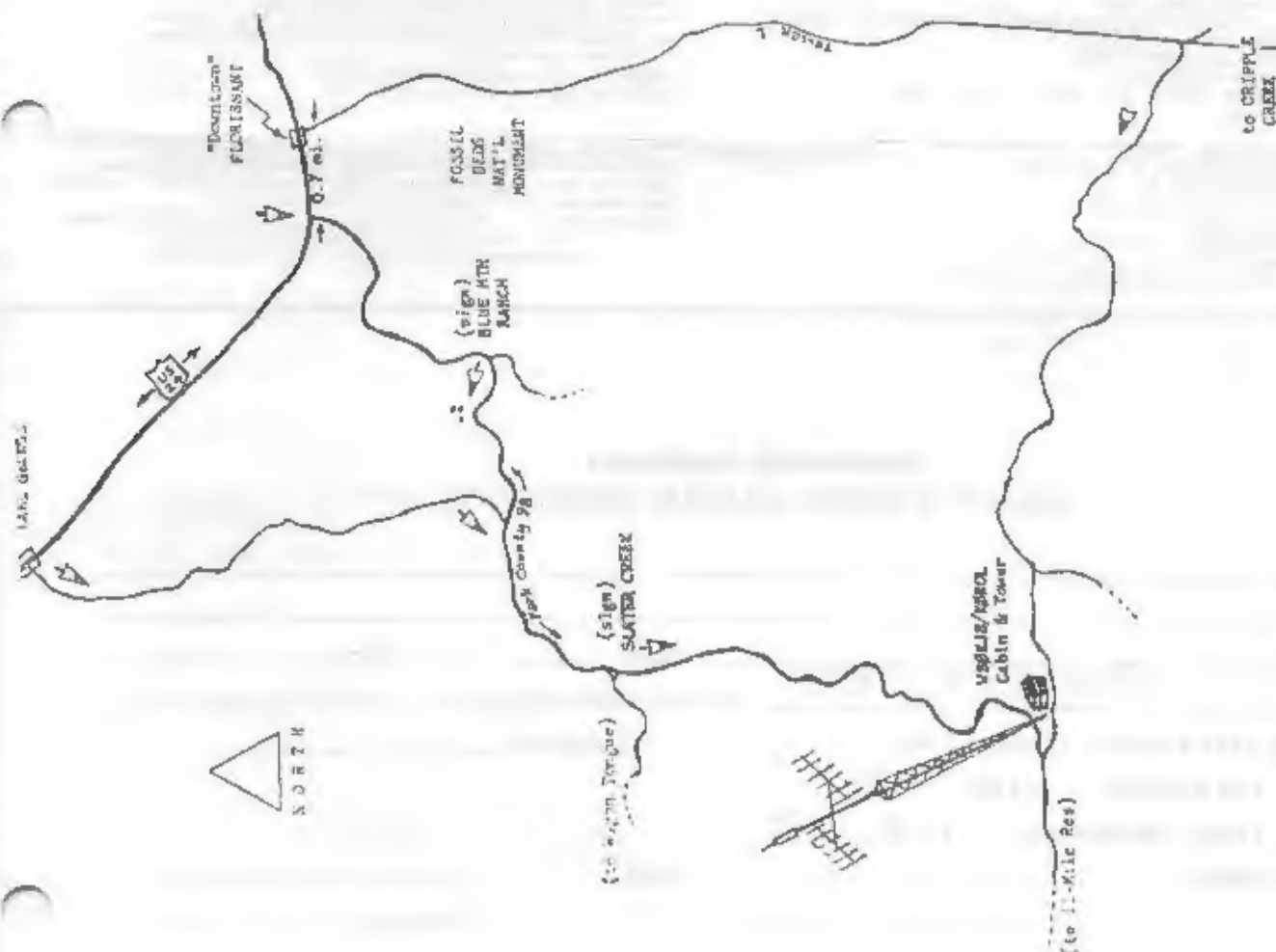
DON — WØGOH

WHOLESALE DISTRIBUTORS OF ELECTRONIC PARTS, SUPPLIES AND EQUIPMENT

## COMPLETE SELECTION OF HAM RADIO EQUIPMENT & ACCESSORIES

★ ★ ★ ★ ★ AUGUST SPECIAL ★ ★ ★ ★ ★  
ARRL 1985 Handbooks - 10% Off!!

BRING YOUR EQUIPMENT TO TRADE — LET'S TALK!



**MILEY'S RADIO**

Jess KØTAA 719 W. 7th St. Florence, Colorado 81226 784-3040

Hours 8 to 6 Tuesday through Friday — Saturdays 8 to 12 — Evening Hours 7:30 to 9 (Call Ahead)

We Will Be Closed August 9-12 and August 30-September 2

Our remote phone recorder will take your phone number & message, and I'll call you back in the evening.  
Your orders shipped as usual.**NEW EQUIPMENT IN STOCK**

Kenwood TS 940S \$1569, w/auto tuner \$1705.  
 Kenwood TS 930S Sale \$1260 w/auto tuner \$1425.  
 Kenwood TS 430S w/free FM board \$695.  
 Kenwood TS 830S \$779. — TS 130 SE \$555.  
 Kenwood TS 830S Demo \$750.  
 Kenwood DG 5 Digital readout for the 520 \$125.  
 PS 430 Power Supply \$134. — PS 30 \$125.  
 Kenwood AT 250 auto antenna tuner for 430S \$290.  
 Kenwood AT 130 tuner \$125 AT 230 Tuner \$170.  
 New Icom 735 \$745.  
 Icom 745 \$765.  
 Yaesu FT 757GX \$695.  
 New "Amp Supply" LA 1000NT 160-15 meter 1200W PEP-800 DC  
 QSK, no tune up, drives with 100W-list \$529 - SALE \$475.  
 Kenwood 4000A 2m & 440 FM Xcvr List \$699 Sale \$525.  
 Same as above w/ voice synthesiser \$560.  
 Kenwood TR-7950 45W List \$459 - Sale \$355.  
 Kenwood 7930 \$314.  
 Kenwood TR 3600 440 MHz HT \$305.  
 Kenwood TR 2600A New HT \$277 or w/extra battery \$298.  
 New Kenwood TH21AT w/free battery \$198 TH41AT \$214.  
 Kenwood TR 3500 440 MHz HT-2 only \$285.  
 Santec 142 2M HT \$239. or w/STB BC desk chgr. \$259.  
 Complete line of Tokyo High Power amps, preamps & tuners at lowest prices.  
 B & W 300 watt tuner-loaded with features \$72.  
 Icom 2AT HT Reg. \$269 Now \$195.  
 Icom 02AT \$289.  
 Icom 4AT \$229.  
 Icom 04AT \$325.  
 Icom 27A \$314/Icom 27H \$360.  
 Icom 47A \$395.  
 Icom 3200 2 meter/440 dual bander \$485.  
 Mirage Amps - Low Prices  
 Azden PCS 4000 \$269.  
 New KDK 4033 220 MHz mobile \$285.  
 New KDK FM 240 mini 25W w/TIM & LCD display, encoder/decoder \$309.  
 Yaesu FT 208R \$229.  
 New Yaesu FT 209RH 5 watt FM HT \$298.  
 Astron PS — ALL AMPS — Low Prices  
 Butternut HF6V 80-10 mtr. vertical \$120. 160 mtr. adapter \$45.  
 Welz test meters in stock  
 AEA CP-1 Computer Interface \$210.  
 Kantronics Packet Controller \$219.  
 Kantronics interface for VIC 20 and others \$125.  
 Kantronics Hamsoft for VIC 20 \$46.  
 Kantronic Hamtext for VIC/Com 64 \$90.  
 Kantronics Interface II - \$239.  
 MFJ wet & dry dummy loads — in stock  
 MFJ Tuners and Keyers — in stock  
 New MFJ 1224 interface in stock w/free soft program \$90.

MFJ 1229 interface w/free soft program \$160.  
 Commodore 1702 color monitor \$199  
 Commodore 1541 Disk Drive \$175  
 Commodore MPS 803 printer \$155.  
 Commodore 64 \$135.  
 Emerson, Magnavox, Panasonic & Sanyo VCR's — Low as \$289.  
 Video equipment at low prices.

**USED EQUIPMENT**

Kenwood TR 2400 like new \$750. w/spkr mike \$170.  
 Kenwood TR 2500 \$175.  
 Kenwood ST 1 desk charger \$40.  
 Kenwood 2400 mobile charger/supply \$25.  
 Kenwood TS 700A 2 meter all mode \$285.  
 Icom 2AT \$135.  
 Icom BC 30 desk charger \$45.  
 Yaesu FT 208R \$175.  
 Kenwood R1000 Gen. Cov. Rcvr \$250.  
 Kenwood TS 930S w/auto tuner-like new \$1095.  
 Kenwood TS 520 w/CW filter-no mike \$395.  
 Icom R70 Gen. Cov. Rcvr. w/\$145 filter \$425.  
 BTL 400A 400 W PEP 6 meter amp \$265.  
 Heath Shawnee 6 meter AM w/AC & DC adapters \$35.  
 Heath 6 meter SSB Xcvr. w/p.s.\$90.  
 Heath 58 303 Rcvr.\$125.  
 Heath 58 401 Transmitter \$125.  
 The above units will transceive as a pair \$225.  
 Heath HW 12 w/AC supply-Nice condition \$125.  
 Yaesu FT 203R w/450 ma. battery \$170.  
 Yaesu FT 301 SD 13.8V digital HF Xcvr. \$325.  
 Yaesu 221 2 mtr. all mode \$250.  
 (2) Yaesu FT 101E w/cascade CW/SSB filters-mint \$395.  
 Yaesu FT 101B \$325.  
 Yaesu FRT 7700 tuner \$50.  
 Yaesu FRG 7700 digital Gen. Cov. Rcvr. \$325.  
 Yaesu FT 230 2 mtr. 25W FM mobile w/TIM \$325.  
 Ten Tec 509 Argonaut QRP w/crystal calib., CW filter-excellent \$175  
 (2) Midland 70-1118 commercial VHF HT's. Complete in boxes.  
 \$195 ea. or pair for \$350.  
 Galaxy 5 w/ AC supply and speaker \$150.  
 Galaxy DC1000 mobile power supply \$25.  
 Drake twins-T4XB, R4B w/p.s., spkr., complete set \$325.  
 Drake TR 4 w/PS & spkr. \$295.  
 Drake TR 4 \$225.  
 Wide selection of amateur antennas-base, mobile, HF, VHF, UHF at reduced prices. We stock Hygain, Hustler, Cushcraft and Larsen antennas, and are now distributors for TET and Butternut antennas.  
 We carry a complete selection of books by ARRL, Ameco, and the Callbook.  
 "We handle anything electronic and love to trade"  
 Much more used & consignment gear — call for info  
 08/85

**Membership Application****PIKES PEAK RADIO AMATEUR ASSOCIATION**

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Call \_\_\_\_\_ License Class \_\_\_\_\_

Are You An ARRL Member? ☐ Yes ☐ No

Telephone \_\_\_\_\_

Full Member \$12.00 ☐Family Membership \$15.00 ☐

Additional Names \_\_\_\_\_ Calls \_\_\_\_\_

Associate Member \$8.00 ☐ (Outside Teller & El Paso Counties.)